

**Amendments to the Specification:**

Please replace the paragraph at page 12, lines 14-20, with the following amended paragraph:

In certain embodiments, inhibition of sex steroid production is achieved by either castration or administration of a sex steroid ~~analogue(s)~~ analog(s). Non-limiting sex steroid ~~analogues~~ analogs include eulexin, goserelin, leuprolide, dioxalan derivatives, ~~such as~~ triptorelin, meterelin, buserelin, histrelin, nafarelin, lutrelin, leuprorelin, and luteinizing hormone-releasing hormone ~~analogues~~ analogs. In some embodiments, the sex steroid ~~analogue~~ analog is an ~~analogue~~ analog of luteinizing hormone-releasing hormone. In certain embodiments, the luteinizing hormone-releasing hormone ~~analogue~~ analog is deslorelin.

Please replace the paragraph bridging pages 38 and 39, with the following amended paragraph:

In some embodiments, the sex steroid-mediated signaling to the thymus is disrupted by administration of a sex steroid analog, such as an analog of leutinizing hormone-releasing hormone (LHRH). Sex steroid analogs are commercially known and their use in therapies and chemical castration are well known. Such analogs include, but are not limited to, the following agonists of the LHRH receptor (LHRH-R): buserelin (*e.g.*, buserelin acetate, trade names Suprefact® (*e.g.*, 0.5-02 mg s.c./day), Suprefact Depot®, and Suprefact® Nasal Spray (*e.g.*, 2 µg per nostril, every 8 hrs.), Hoechst, also described in U.S. Patent Nos. 4,003,884, 4,118,483, and 4,275,001); Cystorelin® (*e.g.*, gonadorelin diacetate tetrahydrate, Hoechst); deslorelin (*e.g.*, deslorelin acetate, Deslorell®, Balance Pharmaceuticals); gonadorelin (*e.g.*, gonadorelin hydrochloride, trade name Factrel® (100 µg i.v. or s.c.), Ayerst Laboratories); goserelin (goserelin

acetate, trade name Zoladex®, AstraZeneca, Auckland, NZ, also described in U.S. Patent Nos. 4,100,274 and 4,128,638; GB 9112859 and GB 9112825); histrelin (*e.g.*, histrelin acetate, Supprelin®, (*s.c.*, 10 µg/kg/day), Ortho, also described in EP 217659); leuprolide (leuprolide acetate, trade name Lupron® or Lupron Depot®; Abbott/TAP, Lake Forest, IL, also described in U.S. Patent Nos. 4,490,291 3,972,859, 4,008,209, 4,992,421, and 4,005,063; DE 2509783); leuprorelin (*e.g.*, leuprorelin acetate, trade name Prostav SR® (*e.g.*, single 3.75 mg dose *s.c.* or *i.m.*/month), Prostav3® (*e.g.*, single 11.25 mg dose *s.c.* every 3 months), Wyeth, USA, also described in Plosker *et al.*, (1994) Drugs 48:930); lutrelin (Wyeth, USA, also described in U.S. Patent No. 4,089,946); Meterelin® (*e.g.*, Avorelina (*e.g.*, 10-15 mg slow-release formulation), also described in WO 91/18016); nafarelin (*e.g.*, trade name Synarel® (*i.n.* 200-1800 µg/day), Syntex, also described in U.S. Patent No. 4,234,571; WO 93/15722; and EP0052510); and triptorelin (*e.g.*, triptorelin pamoate; trade names Trelstar LA® (11.25 mg over 3 months), Trelstar LA Debioclip® (pre-filled, single dose delivery), LA Trelstar Depot® (3.75 mg over one month), and Decapeptyl®, Debiopharm S.A., Switzerland, also described in U.S. Patent Nos. 4,010,125, 4,018,726, 4,024,121, and 5,258,492; EP 364819). LHRH analogs also include, but are not limited to, the following antagonists of the LHRH-R: abarelix (trade name Plenaxis™ (*e.g.*, 100 mg *i.m.* on days 1, 15 and 29, then every 4 weeks thereafter), Praecis Pharmaceuticals, Inc., Cambridge, MA) and cetorelix (*e.g.*, cetorelix acetate, trade name Cetrotide™ (*e.g.*, 0.25 or 3 mg *s.c.*), Zentaris, Frankfurt, Germany). Additional sex steroid analogs include Eulexin® (*e.g.*, flutamide (*e.g.*, 2 capsules 2x/day, total 750 mg/day), Schering-Plough Corp., also described in FR 7923545, WO 86/01105 and PT 100899), and dioxane derivatives (~~*e.g.*, those described in EP 413209~~), and other LHRH analogs such as are described in EP 181236, U.S. Patent Nos. 4,608,251, 4,656,247, 4,642,332, 4,010,149, 3,992,365, and 4,010,149. Combinations of agonists, combinations of antagonists, and combinations of agonists and antagonists are also included. One

non-limiting analog of the invention is deslorelin (described in U.S. Patent No. 4,218,439). For a more extensive list of analogs, see Vickery *et al.* (1984) LHRH and Its Analogs: Contraceptive & Therapeutic Applications (Vickery *et al.*, eds.) MTP Press Ltd., Lancaster, PA. Each analog may also be used in modified form, such as acetates, citrates and other salts thereof, which are well known to those in the art.